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White Sulphur  
Springs.

West Virginia.



Class F249

Book W6 W5





# WHITE SULPHUR SPRINGS



GREENSBORO COUNTY  
WEST VIRGINIA

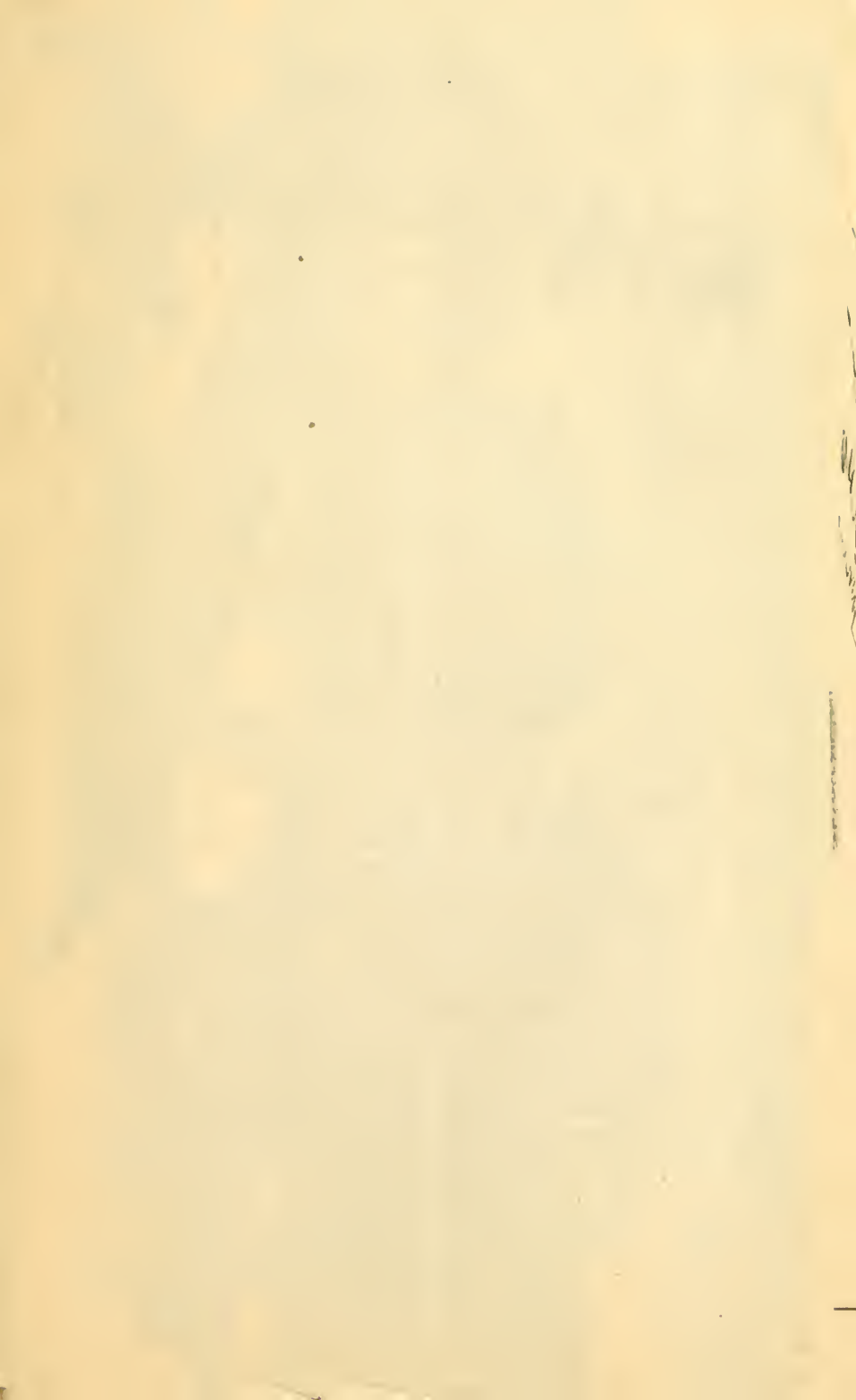


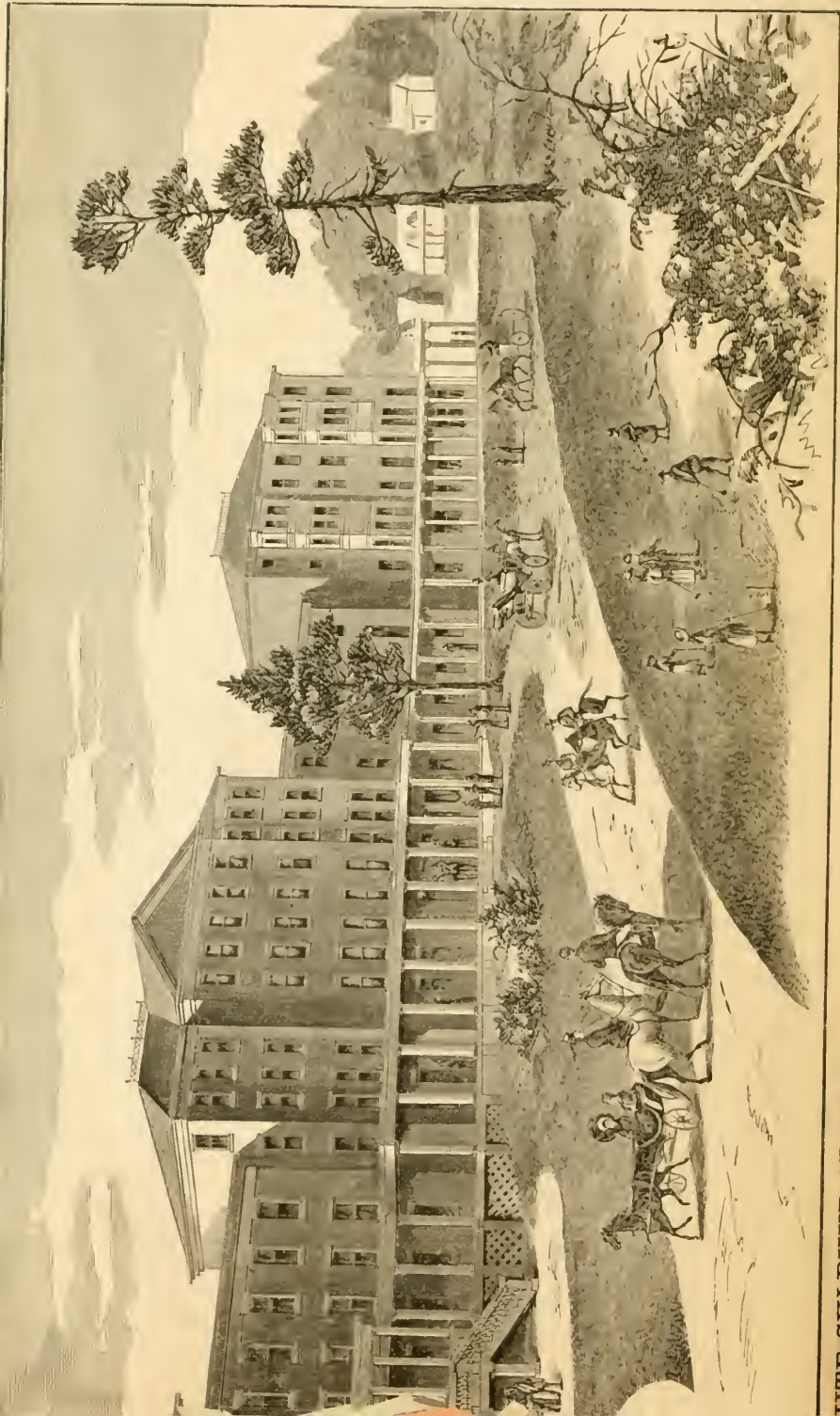
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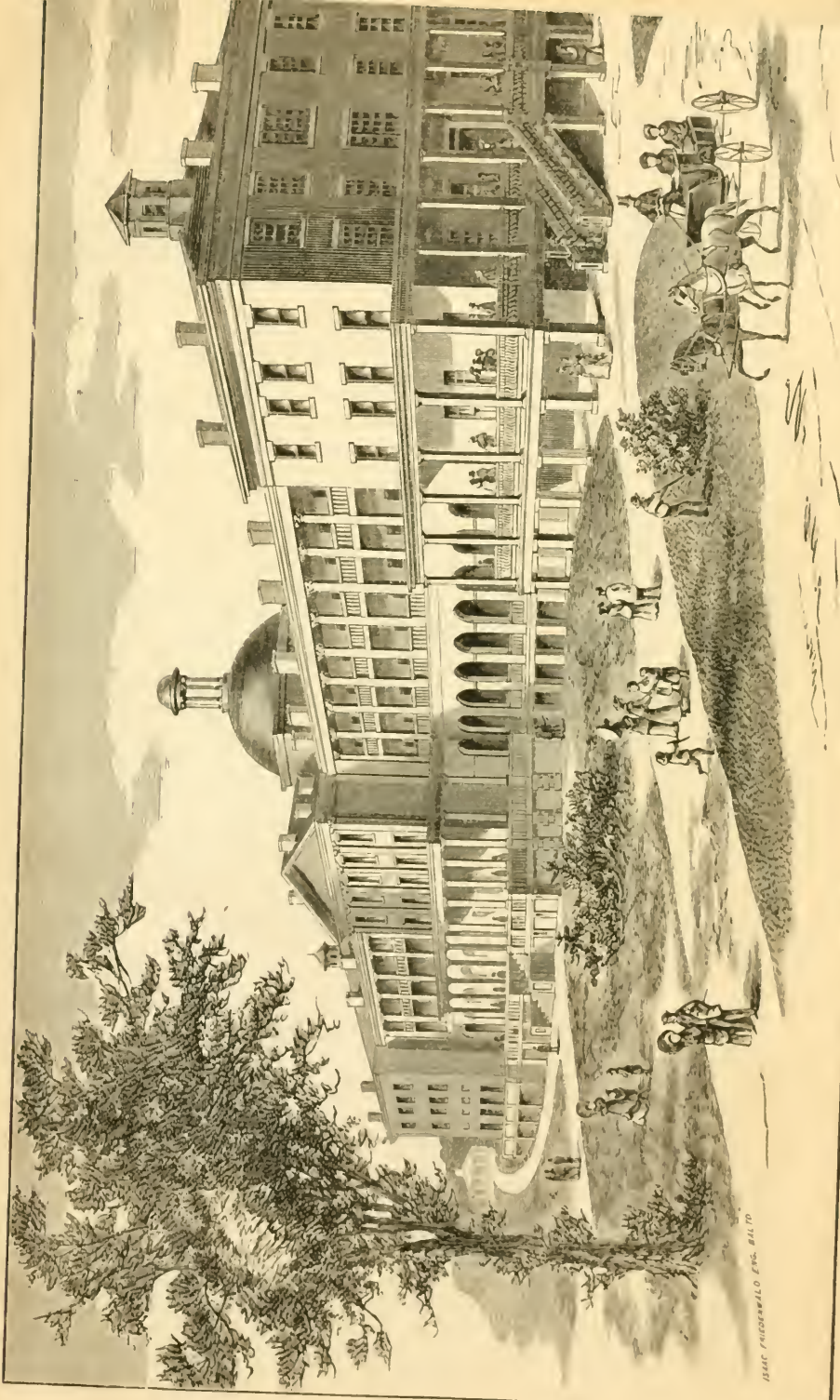
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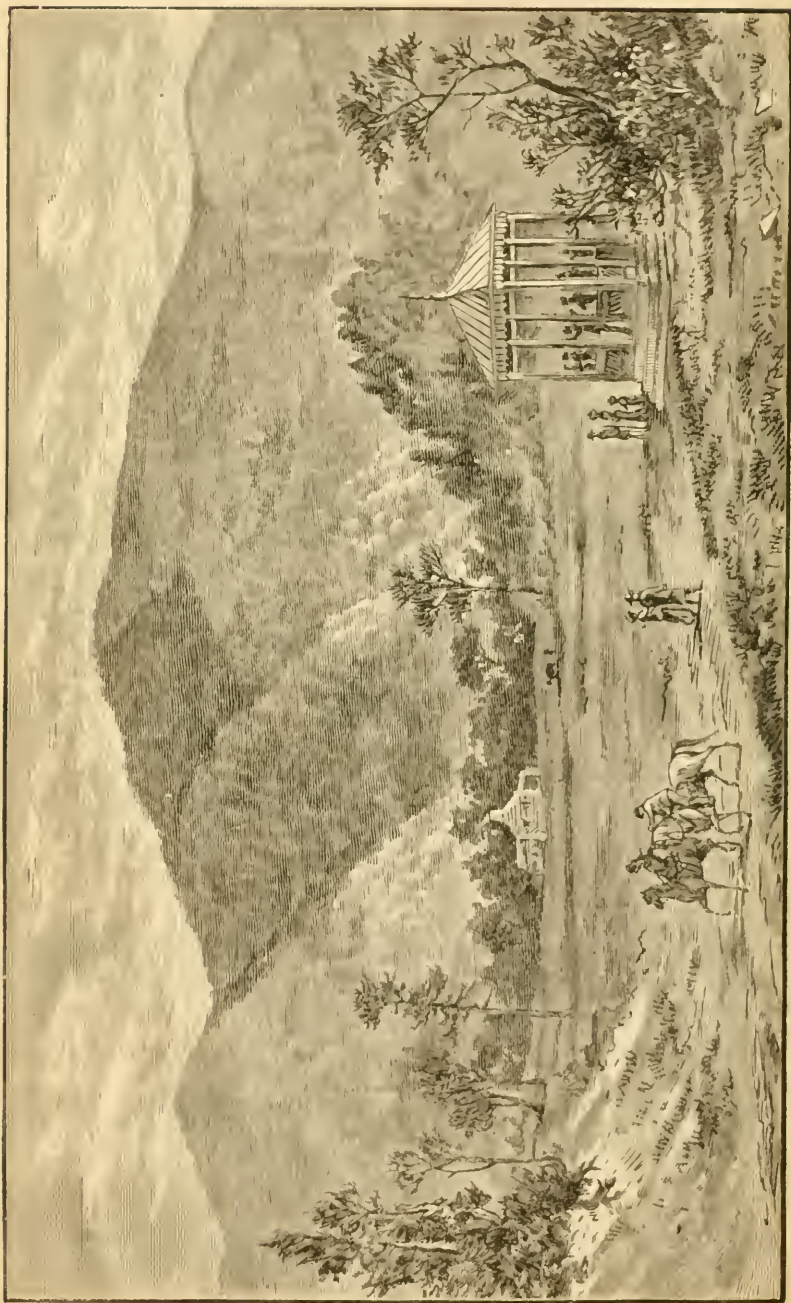


THE SUIT-SPRINGS.





DESIG. FREDERICKO. E. PH. BAL. TD.



KATE'S MOUNTAIN

## ROUTES TO THE SPRINGS.

THE White Sulphur is immediately on the Chesapeake and Ohio Railroad, 100 miles west of the city of Staunton. This road is now running to Huntingdon, on the Ohio river, and by July will be completed to Lexington, Ky., thus connecting with the great system of railroads running from the South and West to the North and East, making this place easily accessible from the southwestern and western country.

Travellers from the North and East by rail, must for the present, necessarily make Staunton a point in reaching the Springs. The route to the Springs from the North is by way of the Midland Road to Charlottesville, and thence to Staunton, or by Harper's Ferry from Baltimore or Washington, and thence up the Valley Road to Staunton. Within a few weeks another route will be open by the completion of the Shenandoah Valley Railroad to Waynesboro, on the C. & O. R. R., twelve miles east of Staunton.

Travellers from the South and Southeast have a choice of three routes, either by Richmond, Danville, or Knoxville, Tenn. All of which in their various connections lead to the Springs by way of Staunton.

It is expected that early in the ensuing season the Richmond and Alleghany Road will be completed from Richmond via Lynchburg to Williamson, a point on the C. & O. R. R. west of Staunton, and that the C. & O. R. R. will be extended eastward from Richmond to Newport News on Chesapeake Bay.

Passengers on the Virginia and Tennessee Railroad, by taking *coach* at *Salem* for twenty-eight miles, over a good macadamized road, to *Buchanan*, on the *Richmond and Alleghany Railroad*, can, on that road, reach the White Sulphur only sixty miles distant from the latter town, thereby avoiding the long detour by Lynchburg and Charlottesville.

## EARLY HISTORY, Etc.

ONE hundred and thirty years ago the entire range of country extending west from the summit of the Alleghany Mountains to the Ohio river, was one vast unbroken wilderness, upon whose soil it is believed the foot of no white man had ever trod.

In 1749 an inhabitant of Frederick County, Va., who was subject to periodical spells of lunacy, wandered far from his home through the western forest, crossed the great Apalachian chain now known as the Alleghanies, and penetrated the wilderness beyond, to the river, now called "Greenbrier." By this time the aberration of his mind had sufficiently abated to enable him to note with surprise the fact that the river ran in an opposite direction to the streams of the country from which he had come. He returned to his home in Frederick, being principally guided in reaching it by the risings of the sun and the positions of the stars, and excited the wonder of his neighbors by relating the marvellous things he had seen in the country beyond the great mountains. Although no general confidence was placed in his statements, nevertheless there were two men, Jacob Martin and Stephen Sewell, who were sufficiently impressed to venture upon an excursion into this newly discovered region. Taking course and general directions from this semi-lunatic, they crossed the mountains, found the river as he had described it, and being pleased with the richness of the soil and the abundance of game, determined to remain in the country. These two hardy

adventurers lived for some time together, and for a portion of the time their place of lodging was a hollow sycamore tree. Before a great while, however, they quarreled, and parted, Martin remaining in the neighborhood of the river, Sewell migrating some thirty or forty miles further west, and fixing his habitation at the base of a lofty range of mountains which have ever since been known as "*Sewell Mountains.*" It is known that Sewell was subsequently killed by the Indians: the fate of Martin is not clearly known, but it was believed he suffered in the same way.

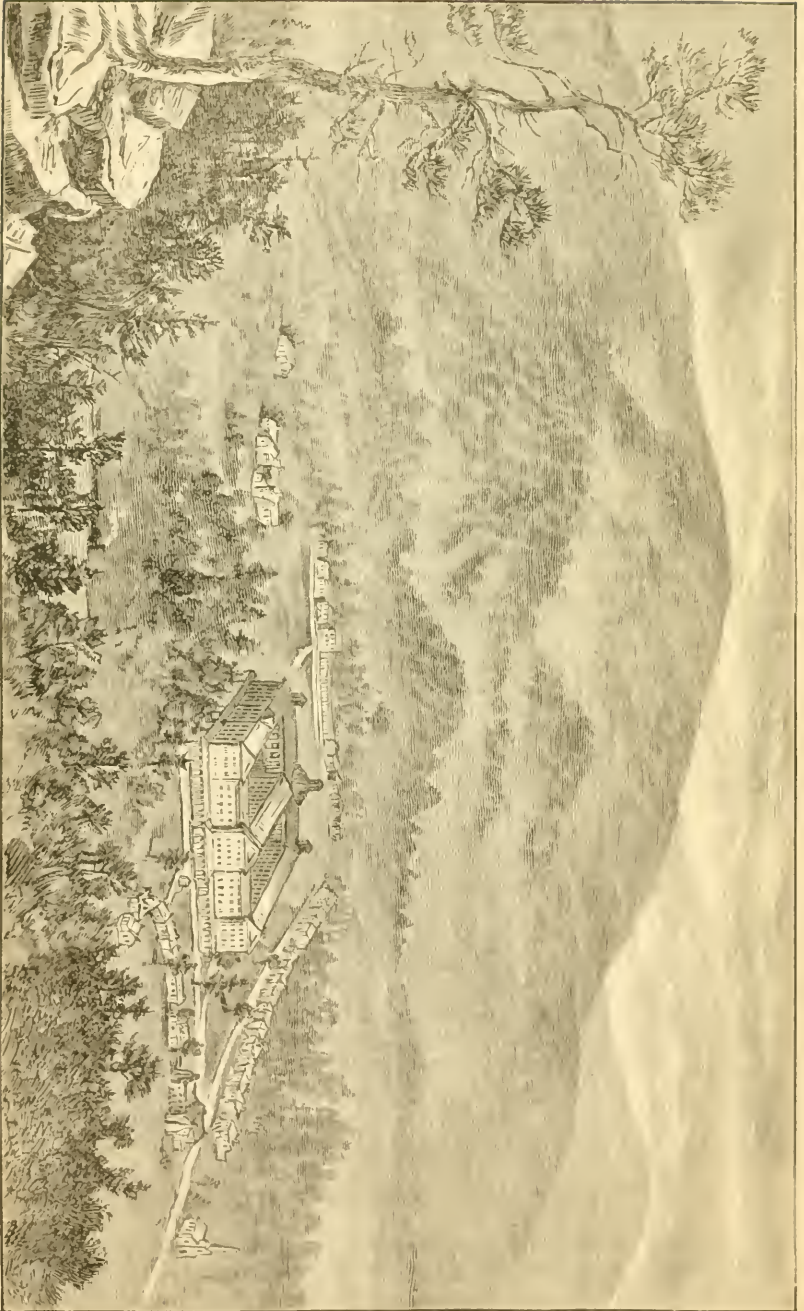
In 1751 General Andrew Lewis, a man of brave and energetic character, made an excursion into this country from eastern Virginia, and found both Martin and Sewell living, then widely separated from each other as has been mentioned. He first named the river alluded to, "Greenbrier," from the abundant growth of green thorny vines found growing upon its borders. General Lewis afterwards became eminent in the history of Virginia, and was chief in command at the famous battle of Point Pleasant, where the Indian power in all this region was fully broken, and they compelled to relinquish the entire country from the Alleghany Mountains to the Ohio river.

Creditable tradition asserts that the charming valley in which the White Sulphur arises was once an Indian town, and its neighboring mountains famous hunting-grounds of the Shawanees, who then owned and occupied this fair region. The numerous ancient graves and rude implements for housekeeping and the chase that used to be found in the valley, lend some probability to, and are possibly the best evidence extant of the truth of the tradition. That a small *marsh*, originally contiguous to the Spring, was once a favorite deer and buffalo "lick," was well known to the early white settlers of the neighboring country, some of whom were known in their latter days to persons now habitués of the Springs; and it has been asserted by some of the same venerable class, that the Spring was regarded by the Indians as a "medicine water," and that after their migration across the Ohio, some of them have been known to seek its use for the cure of rheumatism. Whether this be fact or fiction we cannot avouch; authentic history however abundantly testifies to the reluctance with which they abandoned the lovely valley to the enterprise and avarice of the invading white man.

During the year 1774, the proud but ill-fated Shawanees, the prevailing tribe of this country, being gradually overpowered by the constantly encroaching colonists from eastern Virginia, and having in October of that year suffered a signal defeat at Point Pleasant by the colonial troops, were forced to abandon the occupancy of the country, and seek shelter and protection with a portion of their tribe then living on the waters of the great Sciota; but not entirely, nor until by frequent marauding parties with tomahawk and scalping knife, they had fully attested their attachment to their ancient hunting-grounds and the graves of their fathers.

The part of the property on which the Spring is situated was originally patented under what was then called a "Corn Right," to Nathan Carpenter, one of the early pioneers of the country. Carpenter was subsequently killed by a band of marauding Indians in a stockade fort where the town of Covington now stands, and his wife "Kate" and their children, to avoid the same marauding party, were forced to hide themselves for some time in a neighboring mountain, which now, and ever since, has been called "Kate's Mountain," which immediately overlooks the Spring from the south.

The precise time at which this Spring, now so distinguished among mineral fountains, was first used for the cure of disease, cannot be ascertained



VIEW OF WHITE SULPHUR FROM KATE'S MOUNTAIN.

with absolute certainty. We believe, however, that a Mrs. Anderson, known to the writer when she was far advanced in age, was the first white person that distinctly tested its medicinal virtue. This lady, in 1778, being a sufferer from chronic rheumatism, was conveyed from her residence, twelve miles, to the Springs, then entirely unimproved, where a tent was spread for her protection from the weather, and a "bathing tub" provided by felling and excavating a huge tree that grew hard by. Here she remained, drinking from the fountain and bathing in the water heated by hot rocks, until she was quite recovered.

It is reasonable to suppose that the fame of this cure spread abroad among the "settlers," and from them into eastern Virginia, and among the few "spring-going folk" who then occasionally visited the Sweet Springs on the southern side of the Alleghany. Accordingly, in 1779, and from that to 1783, there were annually a few visitors here who spread their tents near the Spring, no houses having then been erected; and with a rude trough for a bathing tub and this protection from the weather, are reported to have spent their time both agreeably and advantageously. Some of these primitive visitors "who dwelt in tents," returned frequently to the Springs in more modern years, and took pleasure in pointing out the location of their tents some thirty or forty years before; in speaking of the benefits they had derived, and the happiness they had enjoyed in the rustic amusements of these days. In 1784, 1785 and 1786, numerous "log cabins" were erected; not where any of the present buildings stand, but more immediately around the Spring; no one of which, or the materials that composed it, is now remaining.

Mr. James Calwell, the proprietor of this property until the year 1857, came into possession of it in 1808, but did not personally undertake its management or improvement until 1818. Up to that period the buildings for the accommodation of visitors were very rude, consisting altogether of small wooden huts built of logs or boards. The interest and spirit of enterprise of the owner soon led him into a different and more appropriate system of improvement; and from small beginnings he went on progressing in the rapid ratio of demand, until from the "tent accommodations" in 1779, and the "log cabins" in 1784, the place, both in elegance and extent, in a few years exhibited the appearance of a neat and flourishing village:

In the spring of 1857 this property, having been greatly enlarged by the purchase of adjoining territory, making its entire area upwards of 7000 acres, was sold to a company of Virginia gentlemen, who made various and important additions and improvements; and among others, erected in the centre of the Spring grounds the largest hotel building in the Southern country; its dimensions being 400 feet long by a corresponding width, and covering more than an acre of ground.

The entire property was again sold in the spring of 1880 to its present proprietors. Of the character and extent of improvements and additions that have been made or are in progress of construction under the present ownership, the reader is referred to an article in this pamphlet under the head of "Extent and Character of Accommodations."

## RECENT IMPROVEMENTS.

**T**HIS distinguished property, embracing in its ample boundaries upwards of *seven thousand acres* of adjoining territory, has very recently passed by purchase into the hands of its present owners, who have formed themselves into a Joint Stock Company, under the name of *The*

*Greenbrier White Sulphur Springs Company*, of which Col. Geo. L. Peyton is Superintendent.

Immediately after getting possession, the owners proceeded to make valuable alterations and additions to the property, and it is really wonderful what a vast amount of work to these ends was accomplished in a very short time. The new improvements thus far *completed* are a long-needed substantial and thorough sewerage of the property; the building of a large *Steam Laundry*, with all modern improvements complete; the erection of *Gas Works* and gas lighting the entire hotel and grounds; several most advantageous alterations and improvements in the hotel and some of the cottages; various artistic adornments by frescoing and otherwise of the parlor, dining-room and ball-room, and appropriately refurbishing each of them. The parlor is a magnificent room, half as large again as the celebrated East Room in the President's Mansion. The ball-room is the same dimensions as the parlor. The dining-room is more than 300 feet in length and seats 1200 persons. These rooms have all been refitted, and so beautifully painted in *fresco* and elegantly furnished as to call forth the admiration of all beholders. The thorough refurbishing of the entire establishment with substantial and handsome modern furniture, and with beds and bedding of the best quality, contributes largely to the satisfaction and comfort of the guests.

The spring-going public may well be pleased that this property, the *Baden Baden* of America, as European travellers term it, is undergoing extensive enlargement and improvements intended to perpetuate its long borne prestige of preference by the spring-going public.

Evidences are annually accumulating, going to show that this place will always command a patronage in accordance with the extent and quality of its accommodations. While it is now common to enumerate its guests by hundreds during the summer months, they will just as certainly be enumerated by thousands when comfortable accommodations shall have been provided for such numbers. The owners, impressed by this belief, and with a full expectation of being sustained by the public in their plan of enlargement, are now pressing forward an immense amount of work, greatly extending and beautifying this magnificent property. Among other improvements to this end, they are enlarging the hotel by the erection of two lateral wings, one central wing, and an east front. Each outer wing is 450 feet long, forming in connection with the present building an extensive court within, and giving a circuit of 1800 feet as a promenade around the entire buildings. Under this new improvement there will be two parlors, one of which will be 160 feet in length, the other opposite to it, 100 feet; and the present dining-room will be enlarged so as to seat 2000 persons. The new ball-room will be 100 feet square, surrounded by elevated seats. Much of this extensive work will be completed by the 1st of June, and when fully completed will accommodate 1000 guests more than formerly, making the entire capacity of the property equal to the accommodation of 2500 guests.

Among the improvements that will be completed in time for the ensuing season will be an extensive kitchen, on a level with the floor of the dining room, and supplied with all the modern culinary fixtures and appliances.

To prevent annoyance to visitors, all work on these improvements will positively cease on the first day of June.



HOWARD'S CREEK.

J. GREENWALD BUILT



## SCENERY, Etc.

NATURE, with measureless magnificence, has contributed the most charming surroundings of scenery to the White Sulphur. Forest, vale, and mountain are here in rare and unique combination, presenting at every turn new views of the picturesque, the beautiful, and the grand, sufficient for the gratification of every taste. Indeed, here as at Niagara, any attempt at mere art decoration would seem lost folly, if not a desecration.

The first thing that is likely to attract the visitor, and especially from the heated and dusty city, is the vast lawn of green velvety turf, shaded by noble forest oaks, luxuriant sugar-maples and venerable pines, each of which has a symmetry and beauty as distinct in its individuality as the "fair women and brave men" who dream or flirt away the happy hours beneath their leafy canopies. Next, the eye wanders through the curving walks and drives, intermingling, but all tending to the great centre of attraction, the *Grand Old Fountain*, shaded by ancient oaks and daily pouring from its exhaustless resources more than 40,000 gallons of healing waters. To this great "well-spring of healing" come annually returning throngs, who either quaff refreshment or seek new inspiration of health, with feelings akin to the Hindoo worshipper as he approaches the banks of his sacred river. What hope to the weary-minded—what joys to the ascetic dyspeptic—what activities to the halting rheumatic or trembling paralytic have been given forth by this fountain!

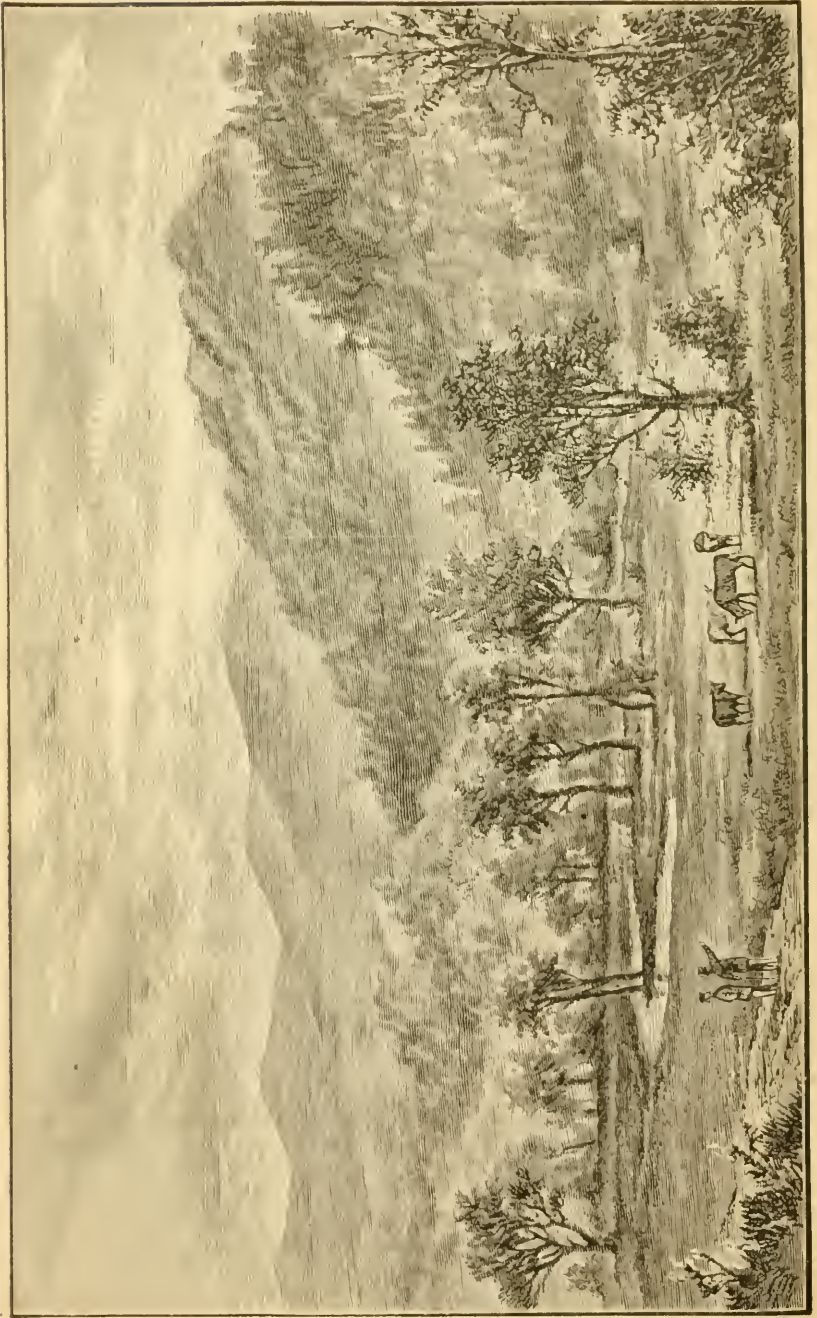
About the "Old White," too, there is, in a peculiar sense, "the immensity of sky and air." Here are no unwholesome vapors; no noxious dews poison the early morn or shadowy twilight—here there is no defilement of *this*, one of nature's great *sanitariums*.

To the newcomer or old habitué there is a never-failing interest, either from the novelty of impressions or the sacredness of association, in gazing upon these *old hills*, wooded with primeval forests, immediately surrounding the grounds, and sloping gracefully down to the cottages, the foliage of the trees overhanging and their flowers peeping cheerfully into the windows.

Just beyond the lawn proper, Howard's Creek flows through the gently undulating meadows, of which a glimpse is enjoyed now and then through the boughs of elms and sugar-maples that grow upon its banks.

A striking feature in the scenery is the surrounding mountains. "Kate's," with its old family legend, is one mile to the south and 3500 feet in height above the sea; "Greenbrier," the same distance to the west, and of equal altitude. To the southwest, and three miles distant, are the mountains known as "White Rock," that consist of a *series of mountains*, but from their complete interlocking and general height are commonly regarded by the casual observer as but one. On the summit of these mountains, in solitary grandeur, reposes the old "TITAN," or *Gi out of the White Sulphur*, who, mythology tells us, fell in one of the battles of the gods, and was converted by *Terra*, the goddess of the earth, into this huge adamantine mass.

What we have feebly attempted to set forth, together with the charming *intervalles* and picturesque patterns of flowering shrubs adorning the meadow and banks of the creek, the forest covered hills in the near and greater distance, together with the distant ranges of lofty mountains stretching beyond the power of vision, form a landscape almost or entirely unequalled, and so striking as to leave ineffable impressions of its beauty and grandeur upon the mind of the beholder.



TITAN, OR GIANT OF THE WHITE SULPHUR

## SOCIETY AND ITS AMUSEMENTS.

NEXT to the medical value of the water of the White Sulphur, and the invigorating climate of the place, the company that annually assembles there is most worthy of notice.

The prestige of the White Sulphur for all that is elegant and refined in society is coeval with its early history. For many years it has been the great central point of reunion for the best society of the South, North, East and West, that here mingle together under circumstances well calculated to promote social intercourse and to call out the kindest feelings of our nature.

The *cottage system* that has been introduced, although new to American watering-places, has proved a complete success, and greatly contributed to the home-like comforts and the sociality of the numerous families assembled here.

Society seems here to meet on common ground, and the different shades of feeling influencing it at home are laid aside, while each individual promotes his own happiness by contributing to the happiness of others.

Here is to be found the statesman, who, worn down with labor and his mind unstrung by the cares of office, seeks from the bracing air, the picturesque scenery, and the genial company, not less than from the health-giving waters, that recuperation of his wasted energies in vain sought for elsewhere. Here, too, is found the man of letters, seeking rest from thought and strength for future effort. The poet, too, is here, to quaff vigor from the sparkling fountain, and new images of beauty from nature's lavish stores that are spread around him; and here, too, come in crowds those who have ever plumed the poet's fancy to its sublimest flights—beauteous woman, by her presence brightening every prospect and gracing every scene. Following naturally in her train come those who ever love to bask in beauty's smiles, and find in such scenes the happiest of their youthful hours. Here, too, congregate the reverend clergy, the doctor, the lawyer, the judge, wearied with the burdens of the bench; the man of commerce, the financier, the thrifty planter, the sturdy farmer, and the retired man of wealth and ease. These, reckoned by thousands, make up the company that annually give tone and character to the White Sulphur, and make it at once the Athens and the Paris of America.

The amusements are various in kind and degree. No sketch can give more than a faint shadowing of the pleasures of a visit to the Springs. The freedom from care, the relaxation from bonds which have fettered us to the treadmill of business—the pure mountain air, every breath of which swells the veins and makes the blood tingle with delight—the wild mountain scenery, awakening new thoughts of the grandeur of creation and the mighty power of God—the amenities of social intercourse, relieved from those necessary but vexatious rules of etiquette which hem in fashionable life at home—all these combine to render a visit to the White Sulphur an epoch in life to be looked forward to, and back upon with pleasurable emotions.

The weary pilgrim, coursing over the burning sands of the East, does not hail the sight of an oasis in mid-desert with more joy than the habitué of the "White," worn down by cares or trouble, welcome the first glimpse of the sparkling fountain, and the verdant lawns encircled by cottage homes. To him they promise rest, comfort, health, while to others they tell of pleasures past and joys to come.



LOVEWELL & CO. N.Y.

LOVER'S LEAP.

CHARACTER AND PROPER MEDICINAL USE  
OF THE  
WHITE SULPHUR WATERS.

By J. J. MOORMAN, M. D.

PHYSICIAN TO THE SPRINGS, AND AUTHOR OF VARIOUS WORKS ON MINERAL WATERS.

MINERAL WATERS possess great and valuable powers, and are in many cases superior to the medicines of the apothecary's shop: and when used under proper and judicious discrimination, are well qualified to assume a place in the great medical mind of the world, and, like well defined articles of the *materia medica*, stand prominently forth as most valuable resources of the healing art.

These views are sanctioned by a sufficient amount of truth and importance to influence us against the common practice of publishing certificates of cases of diseases, unless such cases had been carefully *diagnosed* by a party competent to such duty, and so clearly described as to give them a fair claim to an intelligent public reliance. Upon this branch of the subject, therefore, we propose to rely upon the general results of public opinion, formed from the use of the water for *a century*, and from our own professional experience in their administration for more than *forty years*, in cases the precise pathology and nature of which we carefully investigated in connection with their use in each case, enabling us, we conceive, to determine their power and applicabilities with the certainty that physicians determine the peculiar action of any article of the drug-shop with which they are most familiar.

Medicinal waters, to establish and perpetuate a valuable reputation, must be carefully kept *within the clear boundary of their power over disease*, and *within their true adaptations as curative agents*. Fully impressed with this essential truth, we have ever been even more desirous to *discourage* the use of the White Sulphur waters by persons to whom we did not think them well adapted, as to *encourage* their use by those to whom they would prove beneficial. It is only by a well guarded system of administration that a solid reputation for any potent mineral water can be thoroughly established and permanently maintained. Besides, to be effectually employed, whatever be the *name* of the *disease* for which they are used, the existing *state of the system* at the time, and a proper administration to secure their best effects, are important points that cannot be safely ignored.

There are biasing partialities and prejudices in the whole *certificate system* that are sure to intrude in despite of every effort to keep them out, and hence it is that conclusions in such cases are apt to be too sweepingly made, to be realized by those who rely upon them. We have had abundant reason to know that great injustice is often done to suffering humanity, however

unintentionally, and ultimately, too, to mineral waters, by having them placed, through vague and extravagant certificates, upon the common platform with patent medicines. In this way hopes are often created in the minds of invalids that are destined to sad disappointment, while the failure of the waters to accomplish all that has been injudiciously promised for them causes their reputation unduly to suffer in public estimation.

### ANALYSIS OF THE WATERS.

THE WHITE SULPHUR was analyzed in the winter of 1842, by Prof. Hayes, of Boston, from a few bottles of the water sent to his laboratory the preceding fall. From his report, 50,000 grains (about seven pints) of this water contain in solution 3,633 water grain measure of gaseous matter, or about 1.14 of its volume, consisting of

Nitrogen Gas.....	1.013
Oxygen Gas.....	.108
Carbonic Acid.....	2.244
Hydro-Sulph. Acid*.....	.068

One gallon, or two hundred and thirty-seven cubic inches of the water, contains 19  $\frac{739}{1000}$  cubic inches of gas, having the proportion of

Nitrogen Gas.....	4.680
Oxygen Gas.....	.498
Carbonic Acid.....	11.290
Hydro-Sulph. Acid.....	.271

Fifty thousand grains of this water contain 115  $\frac{775}{1000}$  grains of saline matter, consisting of

Sulphate of Lime.....	67.168
Sulphate of Magnesia.....	30.364
Chloride of Magnesium.....	.859
Carbonate of Lime.....	6.060
Organic Matter (dried at 212°).....	3.740
Carbonic Acid.....	4.584
Silicates (Silica 1.34, Potash 18, Soda 66, Magnesia and a trace of Oxide of Iron).....	2.960

Professor Hayes remarks that the organic matter of the water, in its physical and chemical character, differs essentially from the organic matters of some thermal waters; in contact with earthy sulphates, at a moderate temperature, it produces hydro-sulphuric acid, "and to this source that acid contained in the water may be traced." He adds:

"The medicinal properties of the water are probably due to the action of this organic substance. The hydro-sulphuric acid, resulting from its natural action, is one of the most active substances within the reach of physicians, and there are chemical reasons for supposing that after the water has reached the stomach, similar changes, accompanied by the products of hydro-sulphuric acid, take place."<sup>†</sup>

Professor Wm. B. Rogers also analyzed this water, with the following results:

\*It must be borne in mind that this water was examined by Prof. Hayes several months after its removal from the Spring, and consequently after it had parted with a large portion of its free hydro-sulph. acid gas.

†See Chapter III, on the "Relative virtues of the saline and gaseous contents of the White Sulphur Water," in the "Mineral Springs of North America," by the Author.

Solid matter, procured from 100 cubic inches, dried at 212° Fah., consisting of 65.54 grains:

Sulphate of Lime.....	31.680 grains.
Sulphate of Magnesia.....	8.241 "
Sulphate of Soda.....	4.050 "
Carbonate of Lime.....	1.530 "
Carbonate of Magnesia.....	0.506 "
Chloride of Magnesium.....	0.071 "
Chloride of Calcium.....	0.010 "
Chloride of Sodium.....	0.226 "
Proto-Sulphate of Iron.....	0.069 "
Sulphate of Alumina.....	0.012 "
Earthy Phosphates—a trace.	
Azotized Organic Matter, blended with a large proportion of Sulphur, about.....	0.005 "
Iodine, combined with Sodium or Magnesium.	

Volume of each of the gases, in a free state, estimated in 100 cubic inches:\*

Sulphuretted Hydrogen.....	0.66
Nitrogen.....	1.88
Oxygen.....	0.19
Carbonate Acid.....	3.67

## MEDICAL CHARACTER OF THE WHITE SULPHUR WATER.

THE distinctive medical influences of this water upon the system are *cathartic, diuretic, sudorific* and *alterative*.

Some *cathartic* and *diuretic* effect, as well as a distinct determination to the skin by *sweating*, is easily induced under its use in the great majority who drink it. But the most decidedly controlling effect of the water over diseased action, and that which, more than every other, gives its highest and most valuable character as a remedy, is its ALTERATIVE POWER, or that peculiar action by which it effects salutary *changes* or *alterations* in the blood, in the various secretions, and upon the various tissues of the body.

The certain effects of the water in *stimulating glandular secretions, dissolving chronic inflammations, overcoming obstructions*, and throwing off offensive *debris* from the diseased system, leave no doubt of its distinctive and active alterative powers. Indeed, no article of the *Materia Medica* has more decided alterative effects.

We desire especially to call the attention of physicians, and the intelligent public generally, to this distinctive and remarkable quality of the water. In this, more than anything else, it differs from other mineral waters. Many other waters are found to possess valuable alterative power, and with an equal or greater cathartic or diuretic action, but none have yet been shown to be so *certainly, promptly* and *powerfully alterative* upon the human system.

Some of our unprofessional readers may desire to know the precise meaning that is attached to the term ALTERATIVE, in a medical sense. This term simply means to *alter* or *change*; that is, to alter or change the chemical composition of the blood, the secretions of the glands and the various secretory organs and surfaces, the removal of obstructions from the glands

\*100 cubic inches amount to about three and a half pints.

or minute vessels which occur in congestions, irritations and inflammations, thus restoring the blood and the general organism to their natural condition and to the performance of their natural functions.

We claim that the water has these effects by being *absorbed*, or, in other words, entering into the great circuit of the circulation, and thus exercising the specific or peculiar action of its constituents in promoting the various secretory and excretory processes, and thereby restoring the diseased system to a physiological condition.

Such effects and changes wrought in the sick body are obviously an *alteration*, and the remedy that produces them is an alterative. This is but a part of a medicinal alterative, but it conveys a sufficient idea of its nature.

The water is also remarkable for its power in *reducing the force and frequency of the pulse*, when unduly excited. Its influence in this respect should be regarded, not as a direct sedative effect of the agent, but as the result of its potency in abating general excitement, resolving inflammations and removing obstructions, thus bringing back the system to its normal condition.

Experience in the administration of these waters has abundantly established the fact of their *direct and positive* influence in controlling and eradicating many diseases. Their effects, when properly used, are to revive the languishing circulation, to give a new direction to the vital energies, re-establish the perspiratory action of the skin, bring back to their physiological type the vitiated or suppressed secretions, provoke salutary evacuations, either by urine or stool, or by transpiration; they bring about in the animal economy an internal transmutation—a *profound change*. Entering the circulation, they course through the system, and apply the medicinal materials which they hold in solution in the most minute form of subdivision that can be conceived of, to the diseased surfaces and tissues; they reach and search the most minute ramifications of the capillaries, and remove the morbid condition of these vessels, which are so commonly the primary seats of the disease.

It is thus that they relieve chronic disorder action, and impart natural energy and elasticity to vessels that have been distended either by inflammation or congestion, while they communicate an energy to the muscular fibre and to the animal tissues generally which is not witnessed from the administration of ordinary remedies. It is thus that they produce the *alterative effect*, the "*profound change*" upon the system, of which we have been speaking.

It may be well to remark that all mineral waters, to a greater or less degree, are stimulants, and consequently are inapplicable to the treatment of *acute or highly inflammatory* diseases. This is especially true of the White Sulphur, particularly when drunk fresh at the spring and abounding in its stimulating gas. It is true that when its volatile gas has flown off it becomes *far less stimulating*, and may be used with safety and success in cases to which in its *perfectly fresh state* it would be unadapted. But even in its least stimulating form it is inadmissible for excited or febrile conditions of the system, and especially in high inflammatory action, at least until the violence of such action has been subdued by other agents.

While these waters have excellent *adaptations* for the cure of many diseases, they are *unadapted* also to the treatment of others. It would be irrational to suppose that any medical agent capable of effecting so much good as is this water, when properly directed, should be incapable of doing harm when improperly used. In many cases in which it has a happy adaptation it fails of its good effect from being *improperly* taken, while in a



few cases its effects would be injurious from its very nature, however it might be employed. Some of the latter class of cases, very prominent in their importance, will be noticed under the distinct heading of "*Diseases in which the water should not be used.*"

## POPULAR ERRORS IN THE USE OF MINERAL WATERS.

BEFORE entering upon the consideration of the diseases for which the White Sulphur Water may be beneficially employed, we desire, for the benefit of invalids who may visit these or other mineral waters, to make a few remarks with the view of correcting some at least of the *popular errors* that exist in connection with the use of such waters; and we trust that a life devoted to the investigation of this general subject will relieve us from any appearance of egotism in doing so. We regret that the limited space within which we desire to confine this publication will not allow us to say as much upon the subject as we could wish to do.

*The first of the popular errors* to which we call attention has reference to the *time invalids should use mineral waters.*

There is an opinion in the minds of not a few that such waters should not be drunk longer than a *given number* of days, and that after such time they are prejudicial rather than beneficial. This is an *error*. There is no specific time during which invalids, speaking generally, should use this or any other mineral water. The time during which all such waters should be used depends upon the *nature of the case*, the *manner in which they are used*, the *susceptibilities of the case*, and their *effects* upon the organism and the disease.

There are periods, but *uncertain* periods, in the use of the White Sulphur Water, when it ought to be suspended or discontinued; but such periods can only be judged of by the *effects*, and not from any number of days during which it may have been drunk. If the water be not adapted to the disease and to the existing state of the system, of course it ought not to be used at all; but if it be adapted, it ought to be persisted in until it produces its alternative or proper curative effects.

It happens in many cases that some appropriate management is essential to prevent the water from having vagrant and undesirable operations, and to hasten its speedy and good effects; but it would be in vain to expect its use to result in a cure until it has been properly employed for a *sufficient length of time*, (and this irrespective of the number of days) to produce the desired effect.

From *two to eight weeks* is the range of time within which it may be made to produce all its good effects, or bring the system into such a condition as insures a return to health. But in less than *two weeks*, however skilfully directed, it need not be expected that it will be productive of its full sanitary influences.

The *second popular error* is that of hastily *changing from spring to spring*, without staying sufficiently long at any one to produce lasting or permanent good impressions upon the disease.

A restless disposition often causes invalids to fly from one spring to another, in the vain hope of greater good, when very probably the time they fruitlessly spent at several different springs would have been sufficient to cure them at any one of them that might be even tolerably adapted to their condition.

In this respect, such water drinkers are like the "maid of all work" in the household; always busy, but fully accomplishing nothing.

This criticism does not apply to mere *pleasure seekers*. They may properly go from spring to spring, and spend their time just where they are the happiest.

But it is not so with *invalids* who have *something* for the waters to accomplish in the removal of disease. They should carefully select the water best adapted to their *cases*, and use it *properly* and *perseveringly*, until such effects are produced as the nature of the case requires; or until its inutility has been demonstrated. The first having been effected, the invalid can with propriety, and often to great advantage, resort to other and different waters, or baths, as may be best adapted to his or her nervous condition.

The very *common error* with invalids of a *haphazard* or *experimental* use of strong mineral waters, is a subject well deserving consideration; but anything like a full discussion of it here would necessarily exceed the limits to which we wish to confine this pamphlet.

The importance of a proper use of mineral waters has so impressed the public mind of Continental Europe, that royal edicts have long been in existence, absolutely forbidding the use to all invalids of the strong mineral waters of their respective kingdoms and empires, until the case of *each invalid has been examined by a physician* supposed to be qualified for, and especially appointed to such duty. And it is required of the physician thus officiating, to give to each invalid special directions as to the use of the waters and baths, to which the patient is as much expected to adhere as to any other prescription of his physician.

Under this system of protecting the interest of the invalid, and at the same time guarding the reputation of the waters, the true medicinal powers of the latter have been clearly defined and are as well understood as are the leading articles of the apothecary's shop.

Reason surely gives sanction to the assertion that a *potent* mineral water that has been extensively used for years, has established in the judgment of those who have long watched its medicinal effects some well defined laws of its operative powers upon the human system; or in other words, it has established for itself certain *hygienic* and therapeutic laws, by a knowledge and observation of which it may be taken understandingly, safely, and in a manner to secure its sanative effects without incurring risk or unnecessary delay from improper administration.

Nevertheless, many *serious invalids*, and those too who are desirous of speedy relief, will, with the utmost uncertainty of the correctness of such a course, enter upon the use of such waters entirely in an *experimental way*, and with as much disregard of the known laws of their administration as if no such laws existed.

Such *experimentalists*, by inefficient or untimely dosing, or, far more common, by *overdosing*, sometimes, by using the remedy when they are under a temporary excitement, or other influences that prevent its good effect, (and which by a little precaution might speedily be removed), or by using it too *fresh*, when it ought to be used *stale*, allow themselves either to be positively injured, or at least deprived of the benefits that might have resulted from its proper administration.

Such tentative drinkers may now and then adopt the best course that could have been pursued, and all will go well; but in no few instances it happens that grave mistakes are made and real injury effected. But if no absolute injury shall have been done, it very commonly results that such experimentalists waste much time without deriving compensating advan-

tages, and often, after a week or two of profitless, if not hurtful experimenting, perceive the necessity of ceasing such a course, and begin the use of the agent *de novo* as it were, and as if they had never before taken it at all, and without having derived any advantage from the week or two, it may be, that they had been improperly using it.\*

Invalids intending to use mineral waters for the treatment of their diseases should first satisfactorily ascertain what particular water is best calculated to cure their maladies, and before entering upon its use, acquaint themselves with the proper way of using it, and with the general management and precautions necessary to be observed while under its use, not only in reference to the quantity and times of drinking, but also in reference to *baths*, the manner and periods of taking them, together with a *proper general rule of living*, as relates to diet, exercise and exposure, while they are under agencies and in a climate to which they have not been accustomed. Thus properly informed, and prudently conforming to judicious instructions, they may reasonably hope to secure all the advantages that can be derived from such agents.

The strength of the natural appetite for the good things of this world and the *dicta* of fashion but too commonly override the most judicious medical advice, at a fashionable watering-place, in reference to diet and dress. Still we cannot conscientiously withhold this well-meant warning to the serious invalid at such places, to *eat prudently*, irrespective of the inducement which an active appetite may offer, and to *clothe warmly* and avoid *night exposure*, whatever fashion may demand or temptation crave.

## BEST PERIOD OF THE YEAR FOR INVALID VISITATION.

WE are often asked by correspondents and others as to the best *time* or *period of the season for invalid visitation* to the Springs. As this is a matter of no little importance to the invalid, we remark in reference to the White Sulphur that from the 15th of May to the middle of July is preferable to an *earlier* or *later period* of the season. There are substantial reasons why *invalids* should make their visits within the range of the time mentioned, and that they should prefer an earlier rather than a late period of this range of time.

1st. Because during this period we have the most delightful weather of the season—neither too warm nor too cool for exercise in the open air.

2d. Because the crowd of mere pleasure-seekers has not set in up to this period; the place is less crowded, and all the facilities and comforts of a quiet home are more easily and certainly obtained.

3d. In the early period of the summer solstice, just after the cold and inclement weather of winter and early spring, and before the sufferer has become enervated by the heat of the summer, *chronic disease* more readily yields to the alterative influence of the waters, and consequently the invalid is more certainly and speedily placed under their curative powers; and

4th. Because invalids, whose maladies have been essentially modified or cured in the early part of the summer have a longer period of favorable weather, either here or elsewhere, in which to perpetuate and confirm their amendment and final cure, than those who might receive influences equally beneficial, but obtained at a later period of the summer.

\*The ERROR that most frequently results in positive and lasting injury to the invalid at these springs, is the *improper use of the warm and hot sulphur bath*. Of this I shall more fully write under the head of "*Bathing at the White Sulphur.*"

We might allude to other advantages enjoyed by the invalid who makes his visit to mineral waters early in the season; but let it suffice to remark, that long observation as Medical Director of these waters has abundantly satisfied us of the decided advantage that attaches to early rather than late visitation by those who are seeking to secure the largest amount of benefit from their use. Hence we earnestly suggest to invalids who design visiting these waters in the course of the season not to postpone their visit to a late period of the season, and to choose an early rather than a late period of the time we have designated as preferable. Many invalids will derive as much advantage from three weeks' use of the water in June as they will from four in October.

But while the summer, and especially the early part of it, is the preferable time for using the waters, they may nevertheless be drunk to advantage during the cold weather of the late *fall*, *winter* or early *spring*, provided that those who use them are properly protected by clothing suitable for the season, and by warm and comfortable lodging.

## DISEASES TO WHICH THE WHITE SULPHUR WATER IS APPLICABLE.

**F**OR want of space we can only give a mere synopsis of the diseases for the cure of which the White Sulphur waters have been long and successfully employed, referring readers who desire more particular information upon this subject, as well as for the *proper method of using the waters in the various diseases*, to "*The Mineral Springs of North America.*"

### DYSPEPSIA.

This very common and annoying disease, the especial scourge of the sedentary and the thoughtful, whether existing under the form of irritation of the mucous surface of the stomach, vitiation of the gastric juice, or under the somewhat anomalous characteristic of *Gastralgia*, is treated with much success by a proper course of the White Sulphur water.

The apprehensive and dejected spirit that finds no comfort in the present and forebodes only evil in the future—the hesitating will that matures no purpose and desponds even in success—the emaciation of frame and haggardness of visage—the ever-present endurance and all the imaginary and real ills that torture the hapless dyspeptic—are often made to yield to alterative and invigorating influences that a few weeks' judicious use of the waters have established.

Administered alone, in *every form* of this disease, (for under the name of *dyspepsia* we have several *forms* of stomach disease essentially differing from each other, and requiring different modes of treatment,) its curative powers may not always be so marked; but in several varieties of the disease, and those indeed which we most often witness, it deserves the very highest praise that can be conferred upon any remedy. In cases of this disease in which the *Liver* is implicated, occasioning slow or unhealthy biliary secretions, a state of things that often exists, the water may be used with special advantage. To effect permanent and lasting cures in such cases, the waters should always be pressed to their complete *alterative* effects upon the system. See "*Mineral Waters of the United States and Canada,*" by the author, page 128 and following.

## CHRONIC IRRITATION OF THE MUCOUS MEMBRANE OF THE STOMACH AND BOWELS.

The largest class of invalids that resort to our mineral fountains for relief are those afflicted with *abdominal irritations*, and especially with *Irritations of the mucous coat of the stomach and bowels*.

These irritations are occasionally so marked by a superadded nervous mobility as to conceal their true character from the sufferer, and sometimes from his medical adviser. The disease is far more common in late than in former years. The number of cases at the White Sulphur has been, I am sure, more than triplicated within the last few years. It may be induced by any of the numerous causes whose tendency is to derange the digestive, assimilative and nervous functions, and is often connected with some indigestion, irregular or costive bowels, and with restlessness and unhappy forebodings of impending evils. We have much confidence in the waters in such cases when prudently and cautiously used, aided, if necessary, by proper adjunctive means, and pressed to their full *alterative effects*.\*

## LIVER DISEASES.

Chronic disease of the liver, in some form or other, is a very common disease of our country, especially in the warm latitudes and miasmatic districts. Very many affected with this complaint have annually visited the White Sulphur for the last fifty or sixty years. In no class of cases have the effects of the waters been more fully and satisfactorily tested than in *chronic derangements of the liver*.

The *modus operandi* of sulphur water upon the liver is dissimilar to that of mercury, and yet the effects of the two agents are strikingly analogous. The potent and controlling influence of the water over the secretory function of the liver must be regarded as a specific quality of the agent, and as constituting an important therapeutic feature in the value of the article for diseases of this organ. Its influence upon the liver is gradually but surely to unload it when engorged, and to stimulate it to a healthy performance of its functions when torpid.

The control which this water may be made to exercise over the liver, in correcting and restoring its energies, is as often astonishing as it is gratifying—establishing a copious flow of healthy bile, and a consequent activity of the bowels, imparting a vigor to the whole digestive and assimilative functions, and, consequently, energy and strength to the body and life and elasticity to the spirits.

For many years we have kept a "*Case-Book*" at the White Sulphur, and have carefully noted the influences of the water upon such cases as have been submitted to our management. Among the number are many hundred cases of chronic affections of the liver, embracing diseases of *simple excitement*, *chronic inflammation*, *engorgement*, and obstructions of the biliary ducts, etc. These cases were treated either with the White Sulphur alone, or aided by some appropriate adjunctive remedy; and, in looking at the results, we must be permitted to express a doubt whether a larger *relative* amount of amendments and cures has ever been effected by the usual reme-

\* For a more full account of this disease, its symptoms and treatment, see vol. on the "Mineral Springs of the South and Southwest," by the Author, or his volume on the *Mineral Springs of the United States and Canada*.

dies of the medical shop. This we know is high eulogy of the water in such diseases. It is considerably made, and is no higher than its merits justify.

To hasten and insure the action of the water upon the Liver, the occasional use of some mild aperient medicine that has specific action upon that organ is almost *invariably advisable* during the first few days of using the waters.

When *Scirrhus* of the liver is suspected, the water, if used at all, should be used under the guard of a well-informed medical judgment; for in actual *Scirrhus*, if it be pressed beyond its primary effects upon the stomach and bowels, it is *very decidedly* injurious. We have known several cases in which death was hastened by disregarding this caution.

*For a more full account of the influences of the water in Liver Diseases, the reader is referred to the Author's work on the "Mineral Waters of the United States and Canada," or Mineral Waters of North America.*

### JAUNDICE.

This is a form of liver disease in which obstructions prevent the free egress of the bile from the gall-bladder along its natural channels, and hence occasions its absorption into the general circulation.

In cases of jaundice, in which the obstructing cause is inspissated bile, or very small *calculi*, or when occasioned by inflammation or spasm of the gall-ducts themselves, the White Sulphur water, as might be expected from its influence over the liver, is used with the happiest results.

Indeed, the individuals affected with incipient or confirmed jaundice, and whose livers are free from *scirrhus*, cannot place too much confidence in the use of the White Sulphur water and *baths*, with the occasional aid of mild adjunctive means to aid in its speedy action upon the liver and skin. Thus judiciously employed, and for a sufficient length of time, it invariably proves successful, either in curing the case or in bringing the system into the condition under which a cure speedily results.

In *Scirrhus* of the Liver it should never be used.

### CHRONIC DIARRHŒA.

In *Chronic Diarrhœa*, especially where the mucous coat of the bowels is principally implicated, and, still more, where the case is complicated with derangement of the stomach and liver, the water is often employed with very gratifying effects.

While the water, properly taken, is a most invaluable remedy in *Chronic Mucous Diarrhœa*, in no other disease are prudence and caution more eminently demanded in its administration, and especially for the first few days of using it. When prudently and cautiously prescribed in such cases, it is not only a perfectly safe remedy, but also eminently curative in its effects. Many of the most satisfactory results that we have ever accomplished by the prescription of the White Sulphur water have been in cases of *Chronic Mucous Diarrhœa*.

SEROUS DIARRHŒA, of *chronic character*, requires still greater caution in the early use of the water than the mucous form to which we have been referring; and while the waters, when carefully introduced, constitute a valuable remedy in such cases, they will, if too largely taken, aggravate the worst symptoms of the disease.\*

\* See the details of several interesting cases in the "Mineral Waters of the United States and Canada," by the Author.

### COSTIVENESS.

Habitual costiveness is a state of the system in which the water has been extensively employed—sometimes successfully, sometimes not. When the case depends upon depraved or deficient biliary secretions, much reliance may be placed upon the efficiency of this remedy, if it be carried to the extent of fully *alterating* the system.

Costiveness, dependent upon *inertia* or loss of tone of the coats of the bowels, is among the most difficult of mere functional derangements to relieve. The persistent use of *alterative doses* of the water will, however, sometimes effect it. But, most unwisely, many persons in this condition defeat their chance of a cure by the very improper practice of using *Common salt* in the water to render it purgative. Such a practice may answer a present purpose, but it does much to defeat the *ALTERATIVE* effects of the water, which is its great power in such cases, and no permanent relief can reasonably be expected from the use of the waters if this objectionable practice be persisted in.

### MALARIAL TROUBLES.

Unmistakable evidences of the existence of *Malarial* poison are frequently manifested in visitors here from malarial districts of country; and in some who have had no distinct malarial attack, or even decided threatenings of such attack, before leaving their homes. Indeed, persons from miasmatic regions occasionally have distinct *chills* soon after reaching our high altitude, who probably would not have had such evidence of their malarious condition if they had remained in the low lands. Others are affected with symptoms that clearly demonstrate the existence of this poison in the system, but are exempt from chills.

A full *alterative course* of the waters and Warm Sulphur baths may be greatly relied upon in such cases.

The secretions, and especially the secretions of the liver and kidneys, in all such cases, are more or less deteriorated and locked up; and their restoration to a normal condition is absolutely essential to a return to perfect health. Hence the necessity of using the water in such cases, strictly in reference to its alterative influences—and at the same time of using occasionally some mild and proper medicines to facilitate the correction of the secretions.

### HAY FEVER.

This disorder, periodical in its attacks, and in its symptoms much resembling an ordinary catarrh, is more or less common to all latitudes. Without being dangerous in its consequences, it is annually annoying to many persons, and especially about the period of the fall equinox. Great mountain altitudes as a summer and fall residence, with tonics as medicine, are most relied upon for modification or cure.

The elevation of the White Sulphur, 2,000 feet above the sea level, with immediate surrounding mountains of 3,500 feet, together with an atmosphere of great purity and elasticity, and the alterative and invigorating effects of the water, very happily adapt it as a place of summer and fall

residence of those afflicted with Hay Fever. We have rarely, if ever, seen a case of this disease here that was not benefitted; in some cases entirely relieved for the season, in others greatly modified. In all cases more or less benefit has been derived.

### PILES.

The use of mild laxatives in *hemorrhoids* has long been a favorite practice for their relief. The beneficial effects of the water in this disease is probably to some extent due to its laxative power, but still more to its *alterative effect* upon the liver, through which the hemorrhoidal vessels are favorably impressed.

### DISEASES OF THE URINARY ORGANS.

The White Sulphur water is used with very good effects in *gravel*; indeed, they almost invariably palliate such cases, and frequently, in their early stages, entirely cure them.

*Incipient calculus affections* are relieved by the water pretty much in proportion as it corrects the digestive and assimilating functions, improves the blood, and brings the general economy into a natural type, preparing the kidneys to resist foreign encroachments upon their functions, and to elaborate, from healthy blood, proper and healthy secretions. Where the affection depends upon *acid* predominance in the fluids, the water never fails to palliate, and often cures the case. Whether or not this water should be preferred to other remedies, in *calculus* affections, depends upon the *diathesis* that prevails in the system, and hence the urine should always be carefully analyzed, that we may not act in the dark in such cases.

*Chronic inflammation of the kidneys*, as well as similar affections of the bladder and urethra, are often successfully treated by a judicious use of the waters. We have treated numerous cases of catarrh of the bladder successfully by a proper use of the water and other appropriate remedies in connection with it, always regarding the water, however, as the leading remedy in the case.

*Spermatorrhœa*, often painfully implicating the nervous system, and producing extreme debility, not only of the sexual organs, but also of the general system, is often greatly benefitted at these springs. This disease is generally found complicated with a condition of the skin and glandular organs, and not unfrequently of the mucous surfaces, that eminently require the aid of *alterative remedies*. In all such complications the waters are found very valuable as a primary means, preceding and preparing the system for the use of more decided tonic remedies.

### FEMALE DISEASES.

In *female diseases*, in their various chronic forms of *amenorrhœa* or suppressed menstruation, *dysmenorrhœa*, or painful menstruation, *chlorosis* and *leucorrhœa*, the waters of the White Sulphur have been much employed. When the cases have been judiciously discriminated, and were free from the combinations and states of the system that contraindicate the use of the waters, they have been employed with beneficial results.



## CHRONIC AFFECTIONS OF THE BRAIN.

It is only since we inaugurated the custom of using the water in its *ungaseous form* (more than forty years ago) that it has been taken successfully, or even tolerated by the system, in chronic inflammation of the brain. We need, therefore, scarcely apprise our readers that it is only in its strictly *ungaseous form* that it should be used in such cases, and then in a careful and guarded manner. Thus prescribed, we have in several instances found it beneficial.

## NERVOUS DISEASES.

*Neuralgia*, in some form or other, has become a very common disease in every part of our country, and the number that visit the White Sulphur suffering with this *protean* and painful malady is very considerable. Sometimes this disease exists as a primary or independent affection, but far more frequently as a *consequence* of visceral or organic derangements. Where such is found to be the case, the White Sulphur waters are used with the very best results. As an *alterative*, to prepare the neuralgic for receiving the more tonic waters to advantage, it deserves the largest confidence by those afflicted with this annoying malady.

## PARALYSIS.

The number of paralytics that resort to the White Sulphur is large, and their success in the use of the waters various. Cases resulting from dyspeptic depravities are oftener benefitted than those that have resulted from other causes. In almost every case, however, some benefit to the general health takes place, and sometimes an abatement of the paralysis itself.

## BREAST COMPLAINTS.

In *tubercular consumption*, whether the tubercles be incipient or fully developed, the White Sulphur water should not be used. Its effects in such cases would be prejudicial. But there are other forms of *breast complaints* in which the waters have been found valuable, particularly in that form described as

## SYMPATHETIC CONSUMPTION.\*

This form of breast complaint is the result of morbid sympathies extended from some other parts of the body, and more commonly from a diseased stomach or liver. The great *par vagum* nerve, common to both the stomach and lungs, affords a ready medium of sympathy between these two organs. In protracted cases of dyspepsia the stomach often throws out morbid influences to the windpipe and surfaces of the lungs, occasioning *cough, expectoration, pain in the breast*, and many other usual symptoms of genuine consumption. So completely, indeed, does this *translated* affection wear the livery of the genuine disease that it is often mistaken for it. This form of disease comes often under our notice at the Springs, and we frequently witness the happiest results from the employment of the water in such cases,

\* See "Mineral Waters of the United States and Canadas," by the Author

and the more so because its beneficial effects resolve a painful doubt that often exists in the mind of the patient as to the true character of the disease.

### BRONCHITIS.

This affection is often met with at the Springs, sometimes as a primary affection of the bronchia, and often as a result of other affections, and especially of derangements of the digestive and assimilative organs. In such *translated* cases we frequently find the *bronchitis* relieved in the same degree that the originally diseased organs are benefitted.

### CHRONIC DISEASES OF THE SKIN.

The various chronic diseases of the skin are treated with much success by a full course of White Sulphur waters, in connection with a liberal course of warm or hot sulphur baths. Our experience in the treatment of the various forms of *skin disease* with this water has been large, embracing certainly, in the aggregate, many hundreds of cases; and we would do injustice to such experience, and withhold important hopes from the sufferers from such annoying afflictions, if we failed to express our entire confidence in their employment in such cases. Aided by mild alterative means, proper in themselves, but which of themselves would not generally cure such cases, a thorough course of the water and baths is entitled to the highest degree of confidence in all such affections.

### RHEUMATISM.

The primitive reputation of the Water, and that which at an early day directed public attention to its potency, was derived from its successful employment in rheumatism. The reputation thus early acquired has not been lost, but, on the contrary, established and confirmed by its successful use for nearly a century.

In most rheumatic cases the employment of *warm* or hot *sulphur* baths constitutes a very valuable adjunct in their treatment.

With the Sulphur Water as a drink, and the use of the hot *tub*, *douche* and *sweating* baths of the same water, this place offers the strongest inducements for the resort of persons afflicted with chronic rheumatism that can anywhere be found.

Want of space will not allow us to describe the various forms of rheumatic trouble, and to speak of the relative merits of the waters in the several forms of this disease. We remark, however, that while they prove eminently beneficial in all forms of *chronic rheumatism*, they are more decidedly so in those cases that may properly be termed *muscular*, in distinction from *articular* rheumatism, and this is so whether the cases arise from miasmatic, mercurial, or other more common causes of the disease. *A full course of the waters, with baths properly tempered to the demands of the case, is essential to a perfect cure.*

The victim of this disease seeking to be cured by the use of these waters and baths, must not despair from a failure of a short trial of them. In bad cases a *thorough course* is required for complete relief. But such relief so commonly comes from such a course as to make perseverance very hopeful. We have known bad cases that were but little improved from four weeks' use of the waters, effectually cured by six or eight weeks' use.

### GOUT.

The gouty are numerous among the *habitues* of the White Sulphur. In proportion as the waters impress the digestive and assimilative organs they benefit gout.

Those who come here with confirmed gout often assure us that a course of the waters and baths invariably brings such amelioration of their sufferings for about a year; that is, from one season to another. Hence it is that we so often find the same gouty subjects here regularly from year to year.

### CHRONIC POISONING FROM LEAD

Is very advantageously treated by a full course of the water and baths. When used with sufficient persistency, they may well be regarded as the most reliable remedy to which persons thus afflicted can have recourse, and to such we earnestly recommend a trial of them, the more especially because the ordinary remedies in such cases are admittedly very unreliable.

### SCROFULA.

Sulphur Waters have long been in reputation in the treatment of scrofula. Some English physicians have thought such waters superior to any other remedy in scrofula. Dr. Salisbury, of Avon, New York, speaks favorably of his experience of their use in such diseases.

In the early stages of scrofula the White Sulphur has often been used with decided advantages, but in the advanced stages of this disease we do not consider them at all equal in curative powers to some other mineral waters in this region, and especially to the aluminated chalybeate waters.

### DROPSIES.

The alterative influences of this water are often very conspicuously displayed upon the *absorbent* as well as upon the secretory system, and hence, under its use, dropsical effusions are often removed, while the general health and tone of the system are so improved as to prevent their recumulation.

In cases originating in, or dependent upon, obstructions of the glands, the Sulphur Waters may be used with great confidence.

No invalids under the use of the White Sulphur are more signally benefited by appropriate active medicines in connection with it than dropsical subjects.

Indeed, in all such cases the use of mild medicines adapted to insure the certainty of proper action upon the absorbent and secreting system ought never to be overlooked or neglected in such cases.

### DIABETES.

Occasional cases of *Diabetes* have come under our professional management at the White Sulphur, and among them have been cases of very intense character. As might be supposed from the various and diverse causes

of this disease, and the exhausted state of the organs with which it is often connected, the success of treatment has been various and not always successful. In some cases, however, the waters have had a most admirable effect, and upon the whole we think them worth trying in such cases.

### MERCURIO SYPHILOID.

There is an enfeebled, susceptible and peculiar condition of the system not unfrequently found to arise as the result of a long continued or improper use of mercury in syphilitic disease, and especially in subjects of scrofulous tendency. It seems to be the resultant effect produced by the actions of the two poisons—mercury and the syphilitic virus constituting a disease *sui generis*, and neither strictly mercurial nor syphilitic, but a hybrid. This peculiar disease or state of the system we designate as *mercurio syphiloïd*. We have most frequently met with this peculiar affection in persons of strongly lymphatic temperament, and in those of strumous tendency. Such cases exhibit some of the characteristics of ordinary mercurial disease as well as those of secondary syphilis, but the disease as a whole is not distinctly marked as either. In such cases the antidotal effect of the mercury has probably subdued the virus of the venereal poison, while the joint action of the two has created a new disease, as loathsome, but not as infectious, as the one for the cure of which the mercury was originally administered.

In such cases the waters constitute the best remedy known to us. We know that some may regard our designation of this *hybrid* disease as singular as its announcement is new, but nevertheless ample opportunities for many years for examining such cases establishes in our judgment the correctness of the opinion we expressed.

### EFFECTS OF THE WATER IN INEBRIATION.

During the whole period of our residence at the Springs we have been interested with the marked power manifested by the waters in *overcoming the desire for the use of ardent spirits* in those who have been addicted to their imprudent use. We by no means claim that these waters should be regarded as a specific against either the love or the intemperate use of alcoholic drinks, but simply that a proper use of them is a decided preventive of that feeling of *necessity* or *desire* for the use of strong drinks which drives the inebriate to use them, in despite of his own judgment to the contrary: or, in other words, that their proper use allays or destroys the appetite or nervous craving for ardent spirits, and to such an extent that even the habitual drinker and confirmed inebriate feels little or no desire for them while he is properly using the waters.

During our long residence at these Springs we have witnessed hundreds of cases fully justifying the above statement. This peculiar influence of the White Sulphur water depends, first, upon the action of the *sulphuretted hydrogen gas* that abounds in it, and which is an active nervine stimulant, and as such supplies the want the inebriate feels for his accustomed alcoholic stimulant: and, secondly, it depends upon the *alterative* influences exerted by the waters upon the entire organism. While by its alterative power the entire animal structure is brought into natural and harmonious acting, there is a consequent subsidence of the cerebral and nervous *irritation* which

always prevails in the habitual drunkard, the abatement of which enables him to exert a moral power greater than he could before, and sufficient to overcome the lessened demand which his old habit, if he retains it in any degree, now makes upon him.

In the initiatory, or forming stage of intemperance, the free use of this water may be much relied upon to modify, or entirely prevent the *temptation* for strong drink; and even in the confirmed stage its persevering use may inaugurate a state of the system that will essentially aid the sufferer in overcoming the hurtful habit of intemperance. Indeed, if the habitual drinker can be prevailed upon to use the water properly for some ten days, to the *entire exclusion of alcoholic stimulants*, he will have, for the time at least, but little alcoholic temptation to resist.

Of course we will not be so misunderstood by any as to suppose that we design even to intimate an opinion that this water is a *sure and permanent cure* for either absolute or threatened inebriation. All we intend to assert in this connection is, that a proper and continuous use of the water will *very essentially aid* the intemperate drinker to lay aside the inebriating cup and return to soberness.

The *will* of the excessive drinker must necessarily concur to some extent with any effort successfully made for his relief. But while this is so, an auxiliary agent, as innocent in its effects as Sulphur water, that can so far satisfy the *nervous cravings* of the votary of strong drink as to give him increased power to resist his morbid habit, while at the same time his general health is improved, well deserves the attention of all who need assistance in this direction.

It would be irrational for the inebriate to expect to be cured of his morbid habit by simply visiting the Spring and drinking of its water, however freely, and at the same time (which has been the habit of some) to drink freely also of alcoholic liquors. Such a course could be of no service whatever. Stimulants of whatever kind, in such a case, *must be abstained from* while the water is establishing its peculiar action upon the system. This effected, which can ordinarily be accomplished in ten or twelve days, the success of further persistence in the use of the water is *hopeful*, and easily thereafter under the control of the individual who is seeking relief.

#### USE OF THE WATER BY OPIUM EATERS.

We are occasionally consulted by distant parties who are apprised of the effects of the water in allaying the desire for ardent spirits, whether or not it has the same effects in reference to the desire for *opiates*.

The most that can confidently be said in favor of the use of the waters in such cases—and all that ought to be said—is that when they are *judiciously used and in connection with proper adjunctive management* and appliances, they essentially *aid* the opium-eater in dispensing entirely with the use of that drug. We will only add that, in our management of such cases, we have not found it best to *exclude the entire use of the drug* when the patient *first commences the use of the water*, as we advise shall be done in the case of the inebriate.

## DISEASES IN WHICH THE WATERS SHOULD NOT BE USED.

WE HAVE heretofore mentioned some diseases and states of the system in which these waters *should not be used*. As mistakes upon this subject are matters of importance, we here recapitulate oft repeated cautions, as to some of the more important diseases; and

*First.* They should not be used in *Tubercular Consumption*.

*Second.* They should not be used in *Scirrhus* or *Cancer*; or in that condition of the stomach, liver, or any other organ threatening to terminate in *Scirrhus* or *Cancer*.

*Third.* They should *never be used* in *Hypertrophy* or morbid *Enlargement of the Heart*. In such cases the use of the water or baths always aggravates the disease, and if persisted in *will very much hasten a fatal termination*.

For more than forty years, by our writings and oral declarations, we have warned the Spring-going public against using these waters in enlarged heart; and yet, sudden deaths from this cause continue occasionally to occur here, either from not knowing or disregarding such important warnings.

As the medical director of these waters, and desiring that their use shall be strictly confined within their *legitimate power of doing good*, and as a friend to common humanity, we trust that those afflicted with disease that the waters cannot cure, but must aggravate, will be careful to abstain from using them.

The vital importance of these *caveats* to the unfortunate invalids fully justifies the earnestness with which they are given.

## CHALYBEATE SPRING.

ABOUT forty rods from the White Sulphur is a *Chalybeate Spring*, in which the iron exists in the form of a *carbonate of iron*, the mildest, least offensive, and ordinarily the most valuable form in which ferruginous waters are found.

For the last twenty years this water has been considerably used by the class of visitors whose diseases required an *iron tonic*, and its effects have realized the rational hopes that were indulged in it.

## BATHS AT THE WHITE SULPHUR.

WARM AND HOT BATHING, especially in highly medicated waters, is a remedy of leading importance in a large number of the cases that resort to mineral waters for relief.

The water used for bathing at the White Sulphur flows from the *Sulphur Springs of which the visitors drink*. When we look at the analysis of this water, and find it to contain about one hundred and fifty *grains of active medicinal salts to the gallon*, we cannot fail to see that, so far as the *medication of waters* can favorably affect the *bath* for which they are used, the White Sulphur baths have the strongest claim to confidence, inasmuch as no other waters in America that are used for bathing are more highly impregnated with mineral salts.

These baths, in connection with the drinking of the sulphur waters, although not required in every case, are a matter of the utmost importance in a large number of cases in aiding to produce the best effects of the waters.

Impressed with the great value, in fact the absolute necessity to some invalids, of using such baths in connection with the drinking of the water, the proprietors of the Springs have recently greatly enlarged and so remodeled their *bathing establishment* as to make it in every respect satisfactory, it is believed, to those who may desire to avail themselves of its use.

The *bathing house* is large, affording ample accommodations for the bather. The bathing rooms are spacious, airy and comfortable; and in addition to the usual *tub baths* they have erected *douche* baths for the application of streams of *hot* or *warm* water to local parts of the body, and have set apart rooms arranged for receiving *sweating* baths.

The construction of *douche* and *sweating baths* of sulphur water, to be employed under proper circumstances, in connection with the internal use of the water, is a matter of the utmost importance to the successful treatment of numerous cases that resort here for relief.

The new and improved method of heating water for bathing deserves to be especially noted. This is effected by *steam* in the vessel in which it is used, and is a great improvement over the old method of heating mineral waters for bathing. Under the old plan of heating in a boiler and thence conveying the water to the bathing tub much of its valuable saline matter was precipitated and lost. By this improved method of applying steam to the water in the tub the heat is never so great in raising the water to the bathing point as to cause any important precipitation of its salts: hence, they are left in their natural suspension in the waters to exert their specific effect upon the bather. Not only so, by this improved method hot steam may be let into the tub from time to time, as the water cools, so as to keep it essentially of the same temperature during the entire period of bathing, a consideration often of no small importance. This method of heating mineral waters in the tub in which they are used, in connection with the *douche* and *sweating* baths, brings *hot* and *warm bathing* at this place in favorable competition with bathing at naturally hot and warm fountains, and promises to be productive of the same good effects that are experienced from bathing in such fountains.

Persons intending to *bathe in hot sulphur water* should, previously to doing so, be intelligently instructed under a proper knowledge of their case, as to the precise *temperature* of the bath, and the *length of time* they remain in it. Neglect or disregard of proper instructions, the relying upon chance or the mere dictum of ignorance upon this subject, has often been the cause, within our knowledge, of the aggravation of symptoms, and in several instances of serious consequences. We state, therefore, for the benefit of bathers in sulphur waters, that such baths, to be used *safely and efficaciously*, must be used with careful reference to their *temperature*, the *state of the system when employed*, and the *length of time* the bather remains in them.





→\* A CARD \*←

We feel it due to the protection of our *freehold rights* that we announce to the public that the water and grounds of the WHITE SULPHUR are reserved *exclusively* for the use of its guests, and that we cannot permit the use of the water to persons boarding outside of the establishment. This is not intended, however, to apply to families or individuals permanently residing in the County, and who may desire the use of the water for their own family or individual use.

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→\* CALWELL HOUSE \*←

DRY CREEK,

Is under the control and management of the WHITE SULPHUR SPRINGS Co., and

IS OPEN ALL THE YEAR,

WITH THE FOLLOWING RATES OF CHARGES, VIZ:

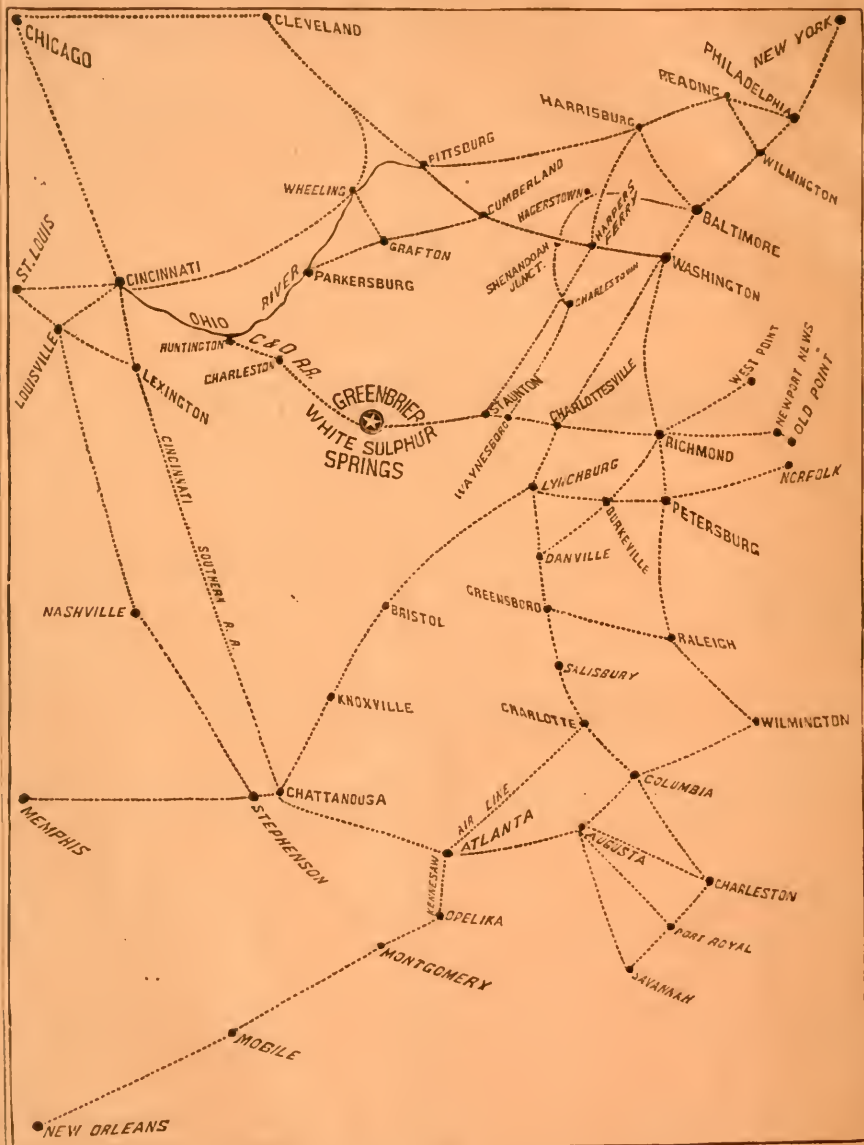
Board per day,	. . . . .	\$ 2 00
“ per month of 28 days,	. . . . .	50 00

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Persons boarding here will have the privileges of the water and grounds of the White Sulphur in common with other visitors.

GEO. L. PEYTON, Supt.

The Depot at White Sulphur is upon the edge of the beautiful Lawn surrounding the Springs.



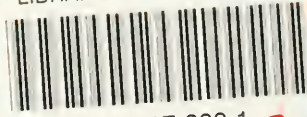
Some of the Railroad Routes Leading to the Greenbrier White Sulphur Springs, West Virginia.







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